First Nations Water Rights in British Columbia

A Historical Summary of the rights of the

Lake Babine First Nation

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MINISTRY OF ENVIRONMENT, LANDS and PARKS
WATER MANAGEMENT BRANCH

FIRST NATIONS WATER RIGHTS IN BRITISH COLUMBIA:

A Historical Summary of the rights of the Lake Babine First Nation

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The sheer numbers of First Nations groups' with histories of water rights made the completion of the Report Series seem, at times, prolonged. The determination, patience and vision of the partners was essential in the completion of the Series and is gratefully acknowledged.

Gary Robinson
Project Manager
Water Management Branch

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FIRST NATIONS WATER RIGHTS REPORT

BAND:	Lake Babine (also known as Nat'oot'en Nation)		
ADDRESS:	P.O. Box 879, Burns Lake, B.C., V0J 1E0		
CHIEF:	Emma Williams		
PHONE:	692-7555	**FAX:**	692-7559
AFFILIATION:	Independent		

LOCATION:

The Lake Babine Band occupy 24 reserves in the vicinity of Babine Lake in the central interior of the province. The reserves range in size from 2.3 hectares to 615.1 hectares, and occupy a total area of 3,093.9 hectares. The reserves are:

Alphonse Tommy 7	Babine River 21	Nedoats 13
Augier Lake 22	Babine River 21A	Ne-tsaw-greece 10
Babine 6	Casdeded 8	No-cut 5
Babine 16	Chanoodandidalch 14	Pinkut Lake 23
Babine 25	Chapel Park 28	Tadinlay 15
Babine 26	Clotalairquot 4	Tahlo Lake 24
Babine Lake 20	Michell Pierre 12	Tsak 9
Babine Lake 21B	Nedoats 11	Woyenne 27

Babine No. 6 and Babine No. 16 jointly hold a conditional water licence on Babine Lake. Babine No. 6 (281.2 hectares) is located on the east side of Babine River, between Nilkitkwa Lake and Babine Lake. Babine No. 16 (285.3 hectares) is located directly opposite, on the west side of Babine River.

The most recent population figures compiled by the Ministry of Finance show 1,266 persons living on the Lake Babine reserves and 473 persons living off-reserve, for a total population of 1,739.

Located on the Interior Plateau and bordered by the Hazelton Mountains to the west, Lake Babine No. 6 sits at elevations between 2400 and 2900 feet above sea level. Lake Babine No. 16 is located at approximately 2400 feet above sea level. Average daily temperatures in January fall to -15 degrees centigrade, while average daily

temperatures for July remain less than 16 degrees centigrade. Average annual rainfall for the area totals between 30 and 50 centimetres.

Water courses of significance include:

- Babine Lake - a large lake which forms the headwaters for Babine River and is a part of the Skeena River watershed. Many of the reserves for the Babine Lake Band are located on its shores. Babine Lake is located just south of Babine Reserve No. 6 and Babine Reserve No. 16.

WATER ALLOCATIONS:

There is no record of water allocations made by either the Indian Reserve Commission, the Lieutenant Governor in Council (by Order-in-Council), or by determinations of the Board of Investigation, with respect to the Lake Babine Band.

The water rights of the Lake Babine Band have been determined by one action of government over the years:

1. The granting of water licenses in response to Federal Government applications requesting authorization for the use of water on reserves.

HISTORY, CURRENT STATUS, AND NOTES:

The history of water rights, the current status of rights and notes for the Lake Babine Band with respect to Babine Lake are as follows:

Babine Lake

History:

Oct 23, 1987 — In response to an application filed by the Department of Indian and Northern Affairs, the Comptroller of Water Rights issued Conditional Water Licence 65491, bearing a precedence date of February 18, 1986, and authorizing the diversion of 15,000 gallons per day, year-round, for domestic use on Babine Reserve No. 6 and Babine Reserve No. 16.

The rights granted under this licence are subject to a water reserve established by Order in Council No. 372, dated April 16, 1928.

Accompanying Conditional Water Licence 65491 was Permit No. 16432 authorizing the occupation of 0.11 acres of unsurveyed foreshore and Crown Land covered by the waters of Babine Lake, 15 feet in width and 330 feet in length.

Jul 16, 1993 Fort Babine Lodge, of Fort Babine Enterprises, applied for a water licence to use an unknown quantity of water (which has been estimated by Water Management to be 5000 gallons a day), and to divert and store 1000 gallons of water. The water was requested for the supply of cabins, campsites, R.V. sites, and a lodge, and is appurtenant to Lot #7023, which is not reserve land. Directors of this company live on Babine Reserve No. 6. Their application is currently being processed under the name of the Lake Babine Band.

Current Status:

There are currently a total of 10 licenses on Babine Lake. Of these licenses:

- 4 authorize the use of water for waterworks purposes, of 15,000 gallons per day, and 36,500,000, 336,000 and 18,250,000 gallons per year, year-round.
- 1 is an application requesting authorization for the use of 5,000 gallons a day, year-round, for use in camps.
- 1 authorizes the use of 1,500 gallons per day, year-round, for domestic use.
- 1 authorizes the use of 25 cubic feet per second, year-round, for conservation purposes.
- 3 authorize the use of water to supply work camps at volumes of 2,500, 12,000, and 7,500 gallons per day, year-round.

The rights held by the Lake Babine Band under Conditional Water Licence 65491 are eighth in priority on Lake Babine.

Order-In-Council No. 372 states that the unrecorded waters of the Skeena River and tributaries (including Babine Lake) in the Prince Rupert Water District are reserved for the use of the Crown. Licenses may be granted with the consent of the Minister of Environment, Lands and Parks if the licence will be for the purpose of the reserve. Licenses for other purposes may only be granted with the prior consent of the Lieutenant Governor in Council.

Water Survey of Canada operated station 08EC001 on the Babine River near the outlet of Babine Lake from 1929 to 1985. During this period the station recorded a minimum daily discharge of 3.68 m^3/sec (130 cubic feet per second) on April 16, 1951 and a maximum daily discharge of 204 m^3/sec (7,204 cubic feet per second) on June 21, 1972. Mean monthly discharges reach a low of 16.9 m^3/sec in April, rise quickly to a high if

114 m^3/sec in June and throughout the fall months remain relatively stable around the mean annual discharge of 46.3 m^3/sec.

Notes:

1. The waters of Babine Lake are subject to a water reserve established by Order-in-Council 372/1928 on the Skeena River and tributaries.

2. The rights of the Lake Babine Band assigned under Conditional Water Licence 65491, are subject to the water reserve.

3. Under current licensing practices Conditional Water Licence 65491 would be issued for waterworks purposes. The amendment of the licence would allow for the designation of the Lake Babine drainage area as a Community Watershed under the provisions of the Forest Practices Code.

4. There is an outstanding application for a licence on file 6000812 by a corporation of the Lake Babine Band to develop a commercial recreational site on leased Crown land alongside Babine Lake south of Alphonse Tommy Reserve No. 7.

OTHER INFORMATION:

Groundwater Records:

A review of records maintained by the MELP - Groundwater Section indicates found that no wells have been reported on the reserves' Babine No. 6 and Babine No. 16.

As the provision of well information to the Groundwater Section is voluntary, this review should not be assumed to be complete.

ATTACHMENT 1

Summary of Water Rights Records

Lake Babine Band

Water Source	Priority Date	Reserve Name	File Number	Document Type	Status	Superceded By	Licence PUC/MOD & OIC Allotments	Comments
Babine Lake	4/16/28		372/28	OIC No. 372	Current		All unrecorded water of the Skeena River *and its tributaries* .	OIC No. 372: **Unrecorded waters** of the Skeena River and its tributaries, including *Babine Lake* , are reserved for use of the Crown.
Babine Lake	1986/02/18	Babine #6 and Babine #16	6000295	CL 65491	Current		15,000 GAD/Waterworks	CL 65491: **Priority 8 - Babine Lake**
Babine Lake	1993/07/16	Not on reserve	6000812	Z 106871	Application		5,000 GAD/Camps	Z 106871: **Application** is for lands NOT appurtenant to reserve properties; Directors of applicant group "*Fort Babine Lodge* " reside and are members of Babine Reserve #6 - Z106871 processed under name of Lake Babine Band.

LEGEND:

Licence Types (Document Types)
CL: Conditional Licence
FL: Final Licence

Mechanisms for Allocation (Document Type)
OIC: Order-in-Council (as issued by the Luitenant Governor in Council)
MOD: Minute of Decision (as recorded under the Indian Reserve Commission)
IRC: Indian Reserve Commission
AGBC: Attorney Generals Office of BC (followed by File #)

Allotment Units (Licence PUC/MOD & OIC Allotments)
GAD: Gallons a day
AF: Acre feet
CFS: Cubic feet per second

ATTACHMENT 2

312/28

Approved and ordered this 16th day of April, A.D. 192[illegible]

[illegible]
Administrator.

At the Executive Council Chamber, Victoria,

PRESENT:

The Honourable

Mr. MacLean
Mr. Pattullo
Mr. Manson
Mr. Sutherland
Mr.
Mr.
Mr.
Mr.

in the Chair.

To His Honour
The Administrator in Council:

The undersigned has the honour to recommend:

3270/28

THAT pursuant to the provisions of Section 290 of the Water Act being Chapter 271 of the Revised Statutes of British Columbia and amendments thereto the unrecorded waters of Skeena River and tributaries and Nass River and tributaries in the Prince Rupert Water District be reserved for the use of the Crown.

THAT a licence for the use of the water so reserved may, with the consent of the Minister of Lands, notwithstanding this reservation, be acquired under Part 2 of the Water Act.

DATED this 14th day of [signature], A.D. 1928.

Minister of Lands.

APPROVED this 16th day of April, A.D. 1928.

[signature]
Presiding Member of the Executive Council.

[illegible] 4

ATTACHMENT 3

Ministry of Environment, Lands and Parks
Water Management

APPLICATION
Water Act, Section 8

PLEASE REFER TO GUIDELINES WHEN COMPLETING THIS APPLICATION

NAME & MAILING ADDRESS

SURNAME: FORT BABINE LODGE
GIVEN NAME(S): 115816 / CC8357
MAILING ADDRESS: P.O. BOX 4452
SMITHERS B.C. V0J 2N0
POSTAL CODE:
BUSINESS / MESSAGE PHONE#:
HOME PHONE#:
FAX#:
Do you hold another water licence? Yes ☐ No ☑
LICENCE / FILE NUMBERS (IF KNOWN): 6402533

FOR OFFICE USE ONLY

MINISTRY OF ENVIRONMENT
JUL 16 1993
WATER MANAGEMENT
SMITHERS, B.C.

FILE#: 6-812
WLIS#: 106871

PLACE OF USE – Legal description of property where water is to be used.

LOT #7023 BABINE LAKE NEAR OUTLET BABINE RIVER

TENURE TO LAND: Registered Owner ☐
LESSEE / OTHER: FORT BABINE ENTERPRISE
CERTIFICATE OF TITLE / PARCEL IDENTIFICATION NUMBER (PID#):
Copy of Legal Plan attached? Yes ☑ No ☐

PURPOSE(S) & QUANTITY – Please refer to Schedule 1 – *Water Purpose & Application Fees.*

QUANTITY UNKNOWN - WATER TO BE USED TO SUPPLY 10 HOUSEKEEPING CABINS, MAIN
LODGE 21 CAMP SITE AND 10 R.V. SITE

SOURCE OF WATER

DISCHARGES INTO: NORTH END OF BABINE LAKE FLOWS TO SKEENA RIVER

WORKS – Existing or proposed to divert and convey water to place of use.

PROPOSED POINT OF DIVERSION LOCATION

DIVERSION WORKS: Pump ☑ Gravity Feed ☐
LENGTH OF PIPE: 360' ft. m
DIAMETER OF PIPE: 2" inch cm
OTHER WORKS:

PROPOSED RESERVOIR LOCATION: 2 C ft. from Lake

STORAGE WORKS
VOLUME OF WATER STORED: 1000 gal m³
DAM HEIGHT: N/A m
AREA OF RESERVOIR: N/A ha

ADDITIONAL INFORMATION
Joint work with others? Yes ☐ No ☑
IF YES, WITH WHOM?
Works constructed? Yes ☑ No ☐ Partially ☐

LANDS AFFECTED – The works will physically affect (by crossing or flooding) the following lands:

LAND DESCRIPTION	NAME OF OWNER (INCLUDING CROWN)

JUL 30 1993

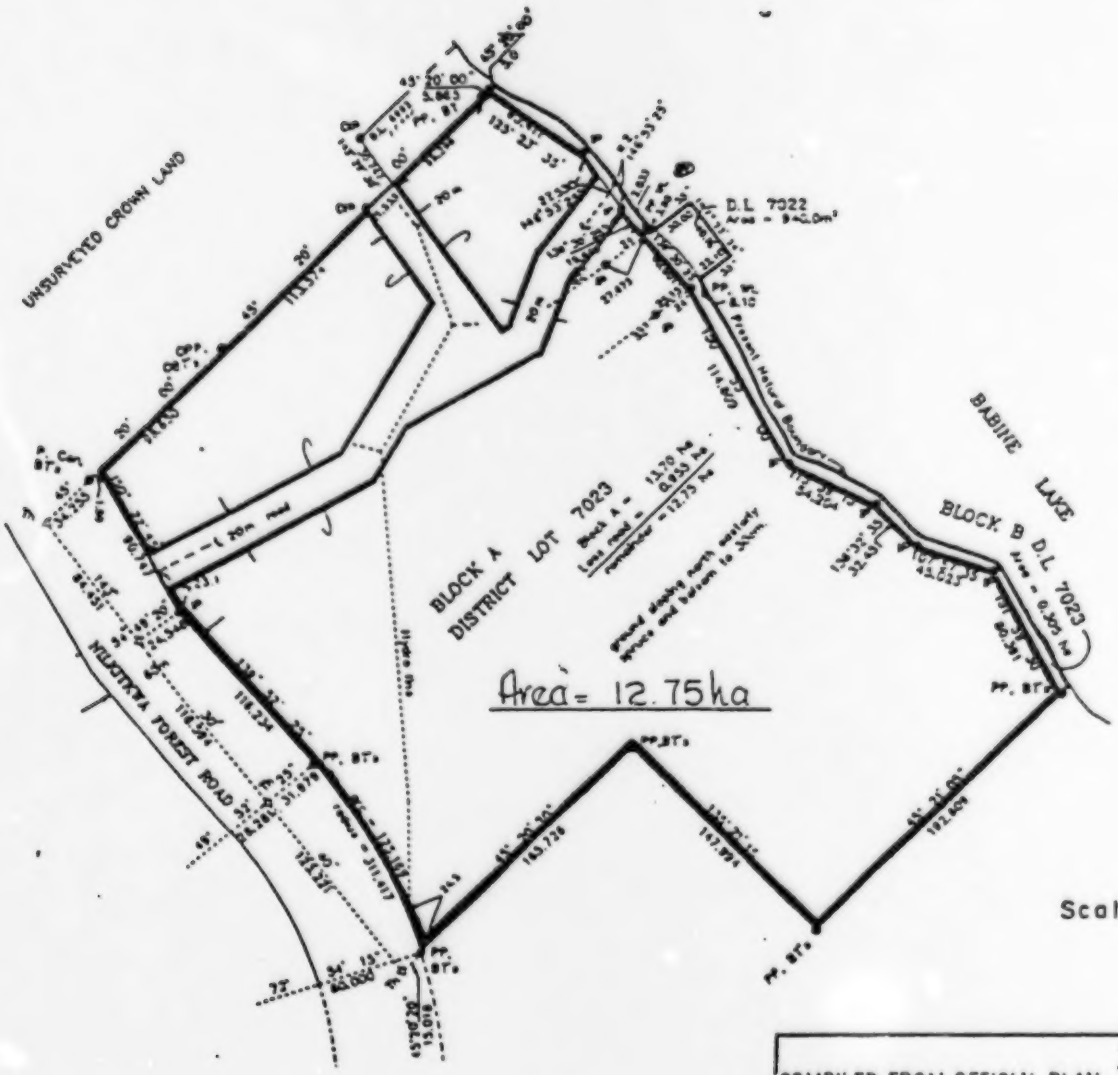
APPLICANT / AGENT'S SIGNATURE: Rod. Pardinski
DATE: Jul 16/93

WP (03/93) KEEP A COPY OF THE APPLICATION AND DRAWING FOR YOUR RECORDS ORCS 02285-01

Pardinski

ATTACHED DEVELOPMENT PLAN

1.2 Sketch Plan



Scale 1:400

COMPILED FROM OFFICIAL PLAN 31.T.142

L57(a) R(01/87) W-1144

9/28

ATTACHMENT 4

WATER MANAGEMENT BRANCH

MINISTRY OF ENVIRONMENT

THE PROVINCE OF BRITISH COLUMBIA—WATER ACT

CONDITIONAL WATER LICENCE

The Honourable Minister of Indian Affairs of P.O. Box 1000, 800 Burrard Street, Vancouver, B.C., V6Z 2J3

is hereby authorized to divert and use water as follows:

(a) The stream on which the rights are granted is Babine Lake.

(b) The point of diversion is located as shown on the attached plan.

(c) The date from which this licence shall have precedence is 18th February, 1986.

(d) The purpose for which this licence is issued is waterworks.

(e) The maximum quantity of water which may be diverted is 15,000 gallons a day.

(f) The period of the year during which the water may be used is the whole year.

(g) The land upon which the water is to be used and to which this licence is appurtenant is Babine Indian Reserve No. 6 and 16, Range 5, Coast District.

(h) The works authorized to be constructed are diversion structure, pump, pipe, reservoir, hydrants and chlorinator, which shall be located approximately as shown on the attached plan.

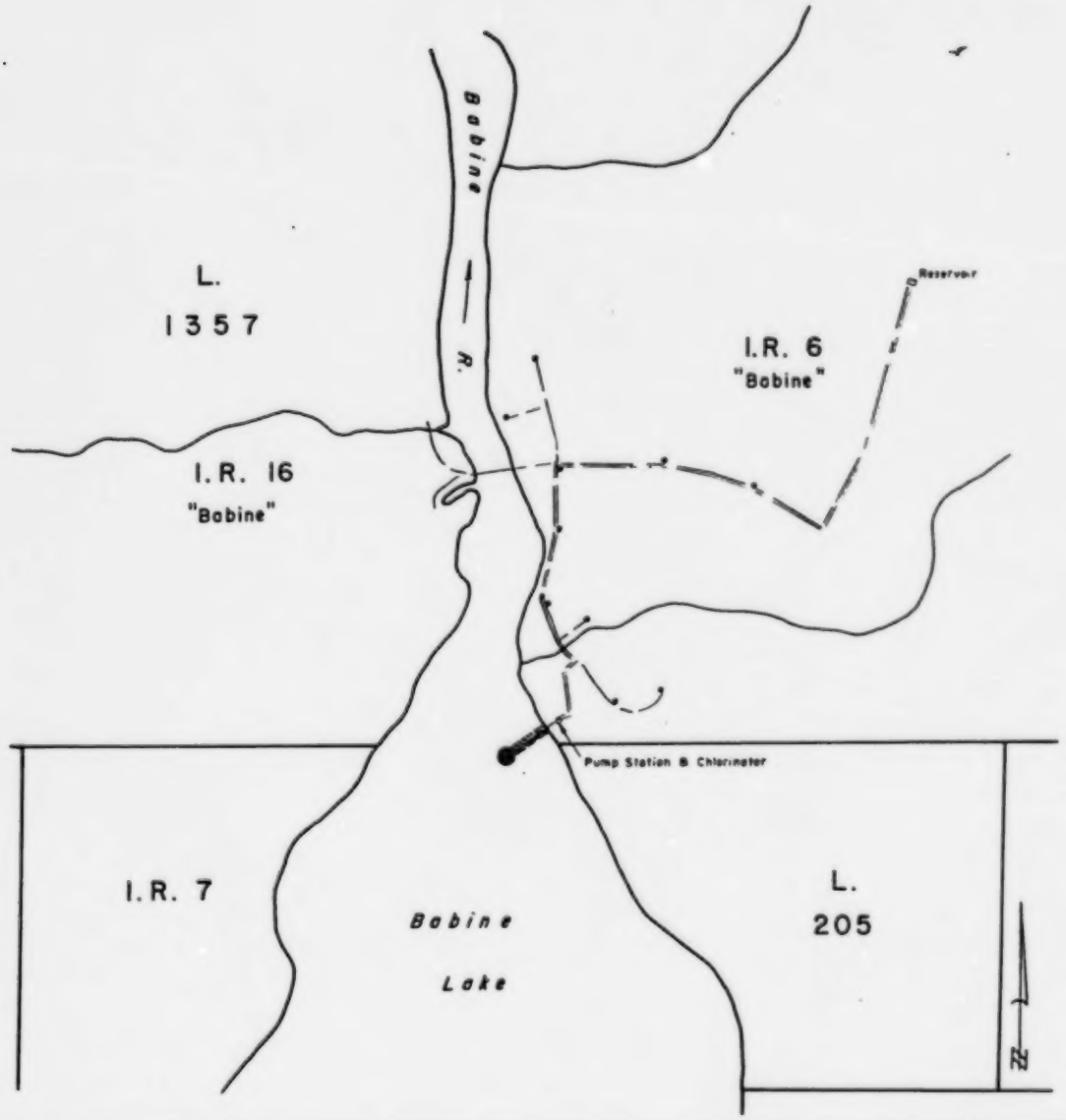
(i) The construction of the said works has been completed and the water is being beneficially used. The licencee shall continue to make a regular beneficial use of the water in the manner authorized herein.

(j) The rights granted under this licence are subject to a water reserve established by Order in Council No. 372, dated 16th April, 1928.

D.W. Roberts, P. Eng.
Regional Water Manager
Northern Region

File No. 6000295 Date issued: OCT 2 3 1987 Conditional Licence 65491

Province of British Columbia



WATER DISTRICT : HAZELTON
PRECINCT : SMITHERS
LAND DISTRICT : R.5, COAST

LEGEND

Scale : 1:10 000
Point of Diversion : ●
Map Number : Ref. 93M/SE (7a,b)
Pipe : ——— - ———
Permit over Crown Land: ~~———~~
Hydronts : •

Signature A.W. Roberts
Date OCT 23 1987

C.L. 65491
File 6000295
P.C.L. 16432

ATTACHMENT 5

Province of British Columbia

Ministry of Environment

PERMIT UNDER THE WATER ACT AUTHORIZING THE OCCUPATION OF CROWN LAND

The holder of Conditional Water Licence 65491, being the Honourable Minister of Indian Affairs at the date of issue of the said licence, whose licence authorizes the diversion of water from Babine Lake, is hereby authorized to occupy Crown Land by constructing, maintaining and operating thereon the works authorized under the said licence and any licence which may be issued in substitution thereof.

(a) The Crown Land which is authorized to be occupied under this permit is a portion of unsurveyed foreshore and land covered by the waters of Babine Lake, Range 5, Coast District, the location of which is shown approximately on the plan attached to the said water licence.

(b) The approximate dimensions of the Crown Land authorized to be occupied under this permit are 330 feet in length, 15 feet in width, and having an area of 0.11 acres.

(c) The permittee may cut and remove from the said Crown Land any timber necessary to permit construction and maintenance of the said works. Prior to the cutting, destruction or flooding of any timber, the permittee shall apply for and obtain a licence to cut timber from the District Manager and the amount of stumpage, royalty and (or) compensation payable to the Crown in respect of trees, including merchantable or young growth, cut, removed, damaged, or destroyed by the permittee, shall be the sum or sums fixed by the Forest Service of the Province of British Columbia.

(d) This permit is appurtenant to the land, mine or undertaking to which the aforesaid water licence is appurtenant.

(e) This permit shall become void if the water licence with respect to which the permit is issued should terminate, be abandoned or cancelled, or amended so as to render this permit unnecessary.

(f) This permit is issued and accepted on the understanding that the permittee shall indemnify and save harmless the Government of the Province of British Columbia for all loss, damage to works, cost or expense suffered by the permittee by reason of the Crown Land or any portion thereof being submerged or damaged by erosion or otherwise affected by flooding.

(g) The holder of this permit shall not be entitled to compensation if the Crown grants permits to other persons to occupy the land affected by this permit.

(h) In the event of a dispute at any time with respect to the area or boundaries of the land affected by this permit, the holder shall, at his own expense, have the said land surveyed by a duly qualified surveyor.

T.R. Johnson
Deputy Minister of Environment

File No. 6000295 Date Issued: OCT 23 1987 Permit No. 16432

ATTACHMENT 6

Stream Register Report Water Licence Information System

Report Requested By : EBABCOCK
Date Report Requested : 1995/09/26 13:21
Report Sorted By : Source Gazetted - Priority Date - Licence Number
Selection Criteria
START POINT : 8021629 - Pinkut Creek left of Babine Lake
END POINT : 8021616 - Babine Lake on Babine River

Priority YYYY/MM/DD	Licence Number	File Number	Appurtenancy	Licensee	PUC	Quantity/Units	Term Start	Term End	Licence Comments	Process Status
Source			NR Map	POD / RED POD Comments					Proc	
1965/02/05	C060636	0360656	L 7665 BEA NO 1 & L 7677 WOLF FRACTION MACDONALD I R 5 COAST DIST	MACLAREN FOREST PRODUCTS INC GRANISLE MINE PO BOX 2000 GRANISLE BC V0J1W0	MECMP	12,000.00 GD	Jan 01	Dec 31	MINING CAMP	
Babine Lake			NR93L/16(g)	B N					12C HAZ - SMITHERS	
1966/02/14	C033313	0367760	BLK A OF L 1351A, L 7687 & 7690 R 5 COAST DIST	GRANISLE VILLAGE OF BOX 120 GRANISLE BC V0J1W0	MUNIA	14,250,000.00 CF	Jan 01	Dec 31		
Babine Lake			NR93.L.089	A N					12C HAZ - SMITHERS	
1970/05/25	C039262	0296492	CONS UNDERTAKING OF LICENSEE WITHIN UCL R 5 COAST DIST HELD UNDER SUP 4116	FISHERIES & OCEANS CANADA 400 - 555 W HASTINGS ST VANCOUVER BC V6B5G3	CONUS	25.00 CS	Jan 01	Dec 31	TEMPERATURE CONTROL	
Babine Lake			NR93K/6(a)	A N					12C HAZ - SMITHERS	
1971/10/05	C107981	0309115	L 7645 R 5 COAST DIST	MACLAREN FOREST PRODUCTS INC BELL MINE PO BOX 2000 GRANISLE BC V0J1W0	MECMP	7,500.00 GD	Jan 01	Dec 31	CAMP	
Babine Lake			NR93L/16(g)	A N					12C HAZ - SMITHERS	
1973/07/19	C040890	0310575	L 33, 34 & 42 OF L 1354 & 1355 R 5 COAST DIST PLAN 5253	MCNEIL HARRY & WILLIAM BOX 21 SS 1 TOPLEY LANDING GRANISLE BC V0J1W0	DOM	1,500.00 GD	Jan 01	Dec 31		VAN VICTORIA AMENDMENT
Babine Lake			NR93.L.090	A N					12C HAZ - SMITHERS	

Priority YYYY/MM/DD	Licence File Number	Appurtenancy	Licensee	PUC	Quantity/Units	Term Start	Term End	Licence Comments	Process Status
Source		WR Map	POD RED POD Comments					Proc	
1979/03/01	C056110 0345364	ALL THE LANDS WITHIN THE BOYS OF	GRANISLE VILLAGE OF BOX 128 GRANISLE BC V0J1W0	WMELA	36,500,000.00 GY	Jan 01	Dec 31		
Babine Lake		WR93.L.089	A W					12C HAZ - SMITHERS	
1985/06/27	C065492 6000265	SUP 10930 CARRIAR DIST	HOUSTON FOREST PRODUCTS COMPANY BOX 5000 HOUSTON BC V0J1Z0	WMIMP	2,500.00 GD	Jan 01	Dec 31	MINE CAMP	
Babine Lake		WR93N/SE(1-f)	C W					12C HAZ - SMITHERS	
1986/02/10	C065491 6000295	UNDERTAKING OF LICENSEE WITHIN IR 6 (BABINE) & IR 16 (BABINE) R 5 COAST DIST	LAKE BABINE INDIAN BAND 985-607-7487 BOX 879 BURNS LAKE BC V0J1E0	WMDOT	15,000.00 GD	Jan 01	Dec 31		
Babine Lake		WR93N/SE(7-b)	D W					12C HAZ - SMITHERS	
1991/11/29	2103970 6000604	THE LANDS WITHIN THE BOUNDARIES OF TH E VILLAGE OF GRANISLE R 5 COAST DIST	GRANISLE VILLAGE OF BOX 128 GRANISLE BC V0J1W0	WMELA	336,000.00 GY	Jan 01	Dec 31		APP APPLIC-CLEARED
Babine Lake		WR93.L.089	A W					12C HAZ - SMITHERS	
1993/07/16	2106871 6000813	L 7023 R 5 COAST DIST HELD UNDER LAND H BRANCH FILE 6402533	LAKE BABINE INDIAN BAND 985-607-7487 BOX 879 BURNS LAKE BC V0J1E0	CAMPS	5,000.00 GD	Jan 01	Dec 31		APP APPLIC-CLEARED
Babine Lake		WR93N/SE(7-b)	F W					12C HAZ - SMITHERS	

---------- Total of 10 Licensees Reported ----------

ATTACHMENT 7

ANNUAL EXTREMES OF DISCHARGE AND ANNUAL TOTAL DISCHARGE FOR THE PERIOD OF RECORD

YEAR	MAXIMUM INSTANTANEOUS DISCHARGE (m^3/s)	MAXIMUM DAILY DISCHARGE (m^3/s)	MINIMUM DAILY DISCHARGE (m^3/s)	TOTAL DISCHARGE (dam^3)	YEAR
1929	---	---	---	---	1929
1930	---	41.6 ON JUN 21	8.30 ON MAR 16	---	1930
1944	---	---	---	---	1944
1945	---	101 ON JUN 08	8.35 ON APR 18	935 000	1945
1946	---	135 ON JUN 05	7.70 ON APR 19	1 310 000	1946
1947	---	91.7 ON JUN 18	8.47 ON APR 02	1 090 000	1947
1948	---	185 E ON JUN 06	9.69 ON APR 21	1 530 000	1948
1949	---	100 ON JUN 10	5.47 ON APR 08	1 040 000	1949
1950	---	111 ON JUN 19	7.33 ON MAY 01	1 100 000	1950
1951	---	130 ON JUN 01	3.68 ON APR 16 *	1 140 000	1951
1952	---	191 E ON JUN 24	8.72 ON APR 11	1 600 000	1952
1953	---	138 ON JUN 12	5.32 ON FEB 18	1 610 000	1953
1954	---	170 E ON JUN 24	14.2 ON APR 26	2 270 000	1954
1955	---	68.0 ON JUN 27	9.91E ON DEC 31	1 070 000	1955
1956	---	80.1 ON JUN 06	5.72E ON APR 24	---	1956
1957	---	106 ON JUN 14	---	---	1957
1958	---	186 ON JUN 11	19.5 ON APR 02	1 800 000	1958
1959	---	153 E ON JUL 12	17.2 ON MAR 30	1 910 000	1959
1960	---	151 ON JUN 25	16.8 ON APR 01	1 790 000	1960
1961	---	121 ON JUN 08	12.0 ON DEC 28	1 730 000	1961
1962	---	92.6 ON JUN 10	6.09 ON MAR 11	1 170 000	1962
1963	---	105 ON JUN 10	17.1 ON APR 03	1 360 000	1963
1964	---	172 ON JUN 15	14.7 ON APR 13	2 040 000	1964
1965	---	155 ON JUN 09	16.4 ON APR 12	1 590 000	1965
1966	---	140 ON JUN 15	17.4 ON MAR 18	1 600 000	1966
1967	---	191 ON JUN 09	15.2 ON APR 17	1 660 000	1967
1968	---	162 E ON JUN 16	15.2 ON APR 10	1 940 000	1968
1969	---	93.2 ON JUN 13	20.8 E ON APR 05	1 370 000	1969
1970	---	96.6 ON JUN 12	23.5 ON DEC 31	1 400 000	1970
1971	---	110 E ON JUL 14	18.5 B ON MAR 01	1 480 000	1971
1972	---	204 ON JUN 21 *	22.1 ON MAR 05	2 110 000	1972
1973	---	113 ON JUN 19	22.1 ON APR 18	1 550 000	1973
1974	159 AT 12:51 PST ON JUN 14	156 ON JUN 14	20.2 E ON APR 09	1 700 000	1974
1975	76.2 AT 22:40 PST ON JUL 09	71.1 ON JUN 19	18.5 E ON APR 14	1 120 000	1975
1976	191 AT 18:55 PST ON JUN 23 *	189 A ON JUN 22	22.4 B ON APR 01	2 410 000	1976
1977	113 AT 14:54 PST ON MAY 26	105 ON JUN 06	26.3 E ON MAR 16	1 540 000	1977
1978	86.4 AT 16:52 PST ON JUN 13	82.1 ON JUN 23	20.6 ON APR 18	1 240 000	1978
1979	106 AT 16:53 PST ON JUN 22	105 ON JUN 10	15.9 E ON DEC 29	1 270 000	1979
1980	59.3 AT 22:17 PST ON JUN 05	55.5 ON JUN 07	14.7 ON APR 09	894 000	1980
1981	127 AT 20:21 PST ON JUN 02	124 ON JUN 03	18.8 ON MAR 29	1 410 000	1981
1982	133 AT 20:02 PST ON JUN 12	128 ON JUN 13	19.2 ON APR 24	1 400 000	1982
1983	78.6 AT 16:16 PST ON JUL 22	76.2 ON JUL 21	14.1 ON APR 11	1 160 000	1983
1984	92.9 AT 01:15 PST ON JUN 28	89.5 ON JUN 27	15.9 ON MAR 20	1 210 000	1984
1985	86.4 AT 10:29 PST ON JUN 11	84.3 ON JUN 11	16.0 B ON FEB 09	1 090 000	1985
				1 460 000	MEAN

A - MANUAL GAUGE (SEE REFERENCE INDEX) B - ICE CONDITIONS E - ESTIMATED * - EXTREME RECORDED FOR THE PERIOD OF RECORD

BABINE RIVER AT OUTLET OF NILKITKWA LAKE - STATION NO. 08EC013

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC METRES PER SECOND FOR THE PERIOD OF RECORD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR
1972	---	---	---	---	87.3	218	174	108	61.7	51.0	51.7	42.4	---	1972
1973	32.7	29.4	26.9	29.7	90.9	141	109	69.4	48.5	36.9	39.0	36.2	55.6	1973
1974	23.9	24.0	22.9	24.6	86.7	168	130	81.5	58.3	43.1	34.7	29.2	60.6	1974
1975	22.4	21.2	20.7	20.5	55.5	82.3	72.0	52.7	43.3	38.4	35.1	30.6	41.3	1975
1976	30.7	29.5	27.8	32.8	146	222	185	123	83.4	59.6	46.2	36.3	85.6	1976
1977	30.8	28.4	25.8	28.1	102	111	84.1	59.2	43.8	38.7	34.1	27.8	51.7	1977
1978	26.9	25.4	23.0	25.1	77.3	91.0	68.6	48.4	34.8	30.6	28.0	23.4	40.1	1978
1979	20.6	20.7	19.8	21.7	70.0	119	94.9	66.7	47.7	39.9	32.0	17.8	44.4	1979
1980	16.3	16.0	16.3	18.4	55.5	60.9	49.5	33.8	30.2	26.9	29.5	26.1	31.8	1980
1981	25.1	22.4	20.7	25.0	94.4	139	98.7	57.1	40.2	29.9	27.0	25.7	50.3	1981
1982	21.4	22.3	22.4	21.1	60.4	144	109	68.7	45.7	33.3	26.2	21.6	49.7	1982
1983	18.3	17.0	16.2	22.0	65.5	76.6	85.6	64.8	44.0	31.6	25.6	21.6	41.0	1983
1984	21.0	18.8	18.5	26.7	67.4	103	83.9	53.3	39.9	37.2	27.8	23.5	43.7	1984
1985	21.1	20.5	19.5	20.8	58.0	101	80.2	49.3	36.5	30.4	26.1	22.4	40.5	1985
1986	19.9R	19.6R	19.9R	21.5R	50.9R	106 R	88.3R	52.6R	35.5R	32.5R	27.7R	22.4R	41.5R	1986
1987	20.5	20.0	19.8	27.7	93.5	110	72.4	44.9	32.1	24.0	28.3	24.1	43.2	1987
1988	20.0	20.5	19.2	26.9	98.9	144	108	66.7	44.9	33.9	29.2	22.8	52.8	1988
1989	20.7	18.5	18.2	24.1	80.3	83.9	56.7	36.9	23.5	19.4	18.1	18.3	35.0	1989
1990	19.5	19.0	18.9	29.8	88.4	132	105	62.4	38.3	29.0	24.3	21.3	49.1	1990
MEAN	22.8R	21.7R	20.9R	25.4R	79.7R	124 R	97.7R	62.4R	42.9R	34.6R	30.0R	25.3R	47.7R	MEAN

LOCATION - LAT 55 25 30 N LONG 126 42 10 W DRAINAGE AREA, 6 790 km^2 NATURAL FLOW

R - REVISED SINCE JAN 01 1989

B.X. CREEK BELOW SWAN LAKE CONTROL DAM - STATION NO. 08XM123

ANNUAL EXTREMES OF DISCHARGE AND ANNUAL TOTAL DISCHARGE FOR THE PERIOD OF RECORD

YEAR	MAXIMUM INSTANTANEOUS DISCHARGE (m^3/s)	MAXIMUM DAILY DISCHARGE (m^3/s)	MINIMUM DAILY DISCHARGE (m^3/s)	TOTAL DISCHARGE (dam^3)	YEAR
1959	---	2.24 ON JUN 05	0.051 ON SEP 07	---	1959
1960	---	1.22 ON MAY 23	0.042 ON OCT 24	9 430	19
1961	---	1.49 ON JUN 15	0.006E ON SEP 21	8 710	19
1962	---	0.385 ON MAY 25	0 E ON SEP 10 *	3 780	196
1963	---	0.728 ON AUG 05	0 E ON MAR 11	2 420	1963
1964	---	2.38 ON JUL 08	0 ON MAY 14	10 700	1964
1965	---	0.912 ON MAY 10	0.023 ON NOV 08	5 580	1965
1966	---	0.459 ON JAN 14	0.014 ON APR 07	2 750	1966
1967	---	---	---	---	1967
1970	---	0.668 ON MAY 25	0.011 ON FEB 11	3 500	1970
1972	---	2.64 ON MAY 31	---	---	1972
1973	---	2.94 ON APR 26 *	0.002 ON SEP 19	6 860	1973
1974	---	2.27 ON MAY 31	0.020E ON SEP 24	15 200	1974
1975	---	1.71 ON JUN 05	0.028 ON NOV 28	12 700	1975
1976	---	1.51 ON JUN 24	0 ON OCT 12	17 700	1976
1977	---	1.15 ON MAY 09	0.023 ON SEP 12	7 230	1977
1978	---	---	---	---	1978
	E - ESTIMATED	* - EXTREME RECORDED FOR THE PERIOD OF RECORD		8 170	MEAN

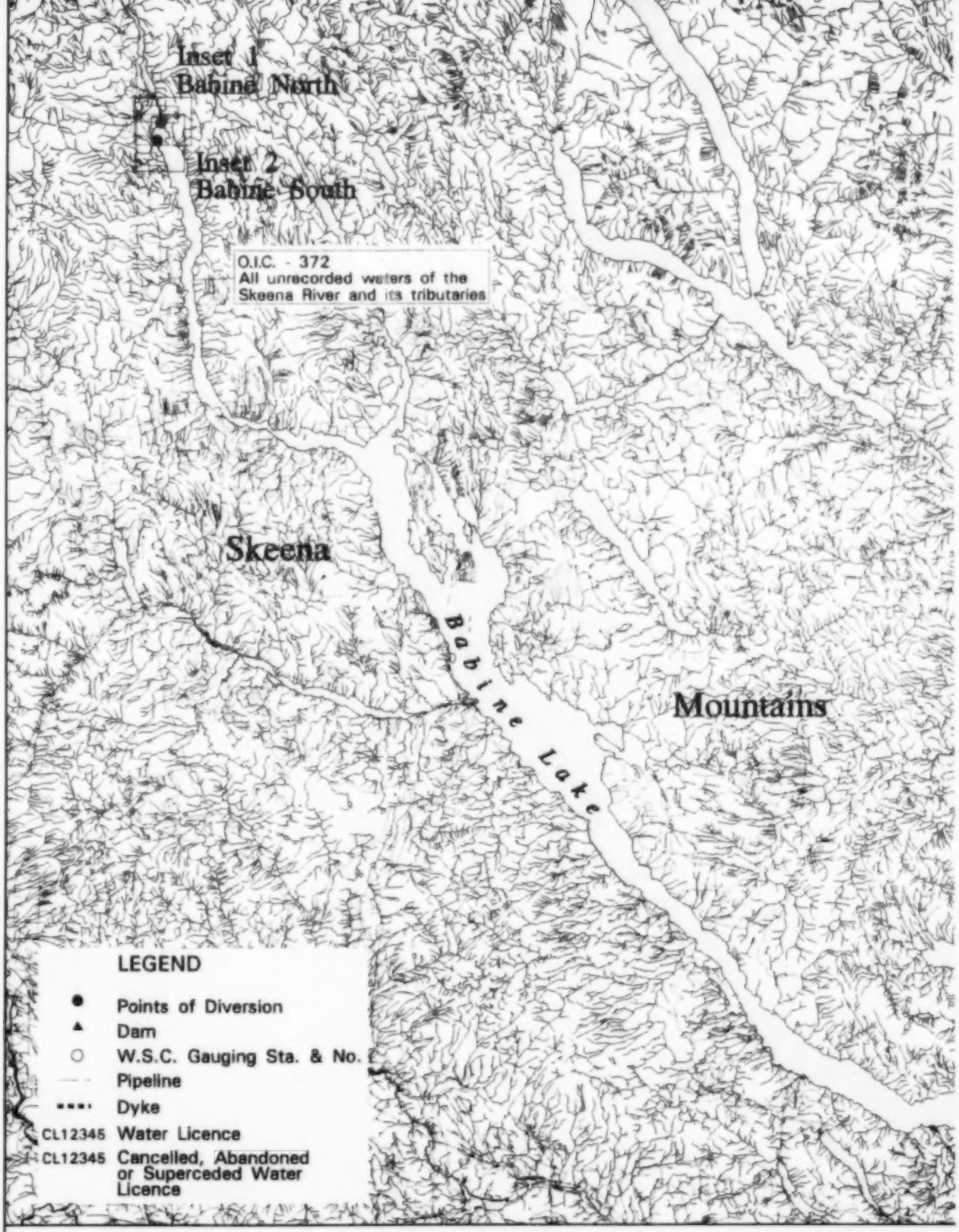
BABINE RIVER AT BABINE - STATION NO. 08EC001

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC METRES PER SECOND FOR THE PERIOD OF RECORD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR
1929	---	---	---	---	---	---	---	---	---	23.0	16.2	12.6	---	1929
1930	11.3	10.4	9.35	8.82	19.2	35.7	35.9	24.7	15.3	---	---	---	---	1930
1944	---	---	---	---	---	---	---	---	---	---	21.9	17.8	---	1944
1945	14.5	12.4	10.4	8.85	28.9	94.4	68.0	41.9	22.4	16.2	13.8	12.2	29.6	1945
1946	11.9	10.3	9.40	8.38	65.1	122	100	68.7	44.2	27.0	18.5	14.8	41.7	1946
1947	16.9	14.1	11.6	10.0	46.1	96.1	73.9	50.3	32.5	27.4	20.0	21.7	34.7	1947
1948	19.4	16.6	14.2	12.3	66.6	166	103	70.3	45.5	37.4	29.0	24.7	48.4	1948
1949	10.8	9.30	7.26	6.22	44.5	91.7	67.8	50.1	32.0	23.6	25.9	25.2	33.0	1949
1950	19.4	14.9	11.3	8.56	32.9	98.6	91.8	58.5	32.9	21.3	14.5	12.2	34.9	1950
1951	10.5	8.97	7.02	4.95	66.9	116	82.1	50.0	26.8	19.7	16.4	16.0	36.0	1951
1952	12.9	12.8	10.3	9.50	61.5	172	141	78.4	43.7	29.4	20.9	14.5	50.6	1952
1953	9.87	8.23	7.07	6.09	58.7	128	114	87.9	54.8	35.6	46.3	44.1	51.0	1953
1954	33.9	26.9	28.6	18.7	43.9	158	141	114	92.9	70.7	65.4	66.0	71.9	1954
1955	44.1	31.4	18.0	14.3	18.6	59.0	64.1	52.5	38.8	26.9	21.4	16.7	33.8	195
1956	8.63	8.04	6.99	5.97	32.0	78.6	66.7	45.2	---	---	---	---	---	1956
1957	---	---	---	---	---	99.0	82.3	85.1	74.7	48.9	37.2	39.4	---	1957
1958	33.2	26.9	23.1	23.6	91.1	171	112	63.5	43.6	38.2	33.1	23.1	57.0	1958
1959	25.1	23.1	19.2	19.7	64.4	132	144	93.4	63.4	48.7	49.6	42.1	60.7	1959
1960	27.4	21.4	18.0	22.5	81.3	143	119	71.7	53.6	44.7	43.4	33.5	56.7	1960
1961	26.2	21.3	18.2	20.5	74.7	112	74.2	42.9	27.0	19.5	17.4	13.3	39.0	1961
1962	12.6	12.0	8.58	8.63	22.6	75.3	87.2	68.8	43.9	33.7	37.8	32.7	37.1	1962
1963	28.0	24.9	19.4	19.0	59.6	100	81.9	61.2	43.2	33.1	25.7	21.3	43.1	1963
1964	19.2	17.2	16.0	15.5	40.6	155	143	130	84.0	66.0	48.8	35.8	64.4	1964
1965	24.6	23.1	19.1	18.2	61.5	144	112	71.1	41.1	32.1	31.7	25.5	50.4	1965
1966	20.9	20.0	16.1	20.6	59.3	131	105	62.9	52.6	40.0	34.8	29.3	50.9	1966
1967	24.7	21.8	19.3	19.7	77.7	174	116	69.1	43.6	35.9	37.6	41.5	57.7	1967
1968	28.9	27.0	23.2	22.0	64.6	159	122	93.1	63.4	44.7	45.4	47.8	63.4	1968
1969	32.6	27.2	23.2	22.1	51.3	87.1	61.6	38.5	39.7	44.0	45.2	47.9	43.5	1969
1970	39.9	32.1	28.8	28.5	52.0	90.0	65.8	63.9	45.7	33.8	26.9	24.6	44.4	1970
1971	21.4	18.6	19.4	19.9	45.1	97.3	105	72.7	50.1	40.3	33.0	30.6	47.0	1971
1972	24.0	27.1	25.8	25.6	72.8	182	154	99.2	58.5	46.0	46.0	37.4	66.9	1972
1973	28.7	25.8	24.1	23.5	70.5	121	99.0	64.7	44.2	35.3	26.6	23.4	49.0	1973
1974	22.3	22.4	21.4	21.2	71.7	147	118	75.0	50.4	38.2	30.5	26.1	53.8	1974
1975	20.9	19.8	19.4	19.4	40.9	69.3	61.2	46.6	39.4	31.8	28.9	25.9	35.4	1975
1976	25.5	24.6	23.0	27.0	125	185	165	118	81.1	58.6	43.4	35.3	76.1	1976
1977	31.7	29.8	27.1	32.2	90.0	99.0	77.3	56.0	41.5	37.5	33.3	27.7	48.7	1977
1978	25.7	22.9	21.4	21.4	48.7	79.0	62.7	40.7	30.3	26.9	25.0	22.2	35.6	1978
1979	19.5	19.3	18.9	18.2	55.9	102	86.4	56.2	37.7	27.8	21.6	17.0	40.2	1979
1980	15.6	15.2	15.7	16.6	42.4	52.7	43.8	31.7	27.1	25.5	27.4	25.0	28.2	1980
1981	23.3	21.1	19.4	20.8	72.2	119	89.3	57.2	38.5	28.0	24.9	21.7	44.7	1981
1982	20.3	20.8	20.6	19.2	43.4	117	97.1	66.8	46.0	34.4	26.2	20.5	44.5	1982
1983	17.8	16.4	15.8	16.4	51.9	66.6	72.4	61.7	42.9	31.7	26.4	21.4	36.9	1983
1984	19.3	16.8	16.7	18.7	55.2	86.9	75.5	51.9	37.3	31.3	25.9	21.6	38.2	1984
1985	18.6	18.4	18.3	17.6	40.4	80.2	67.9	45.9	34.0	28.8	23.2	19.8	34.5	1985
MEAN	21.6	19.2	17.2	16.9	57.3	114	94.2	65.5	45.4	35.4	30.6	26.1	46.3	MEAN

LOCATION - LAT 55 19 25 N LONG 126 37 40 W DRAINAGE AREA, 6 480 km^2 NATURAL FLOW

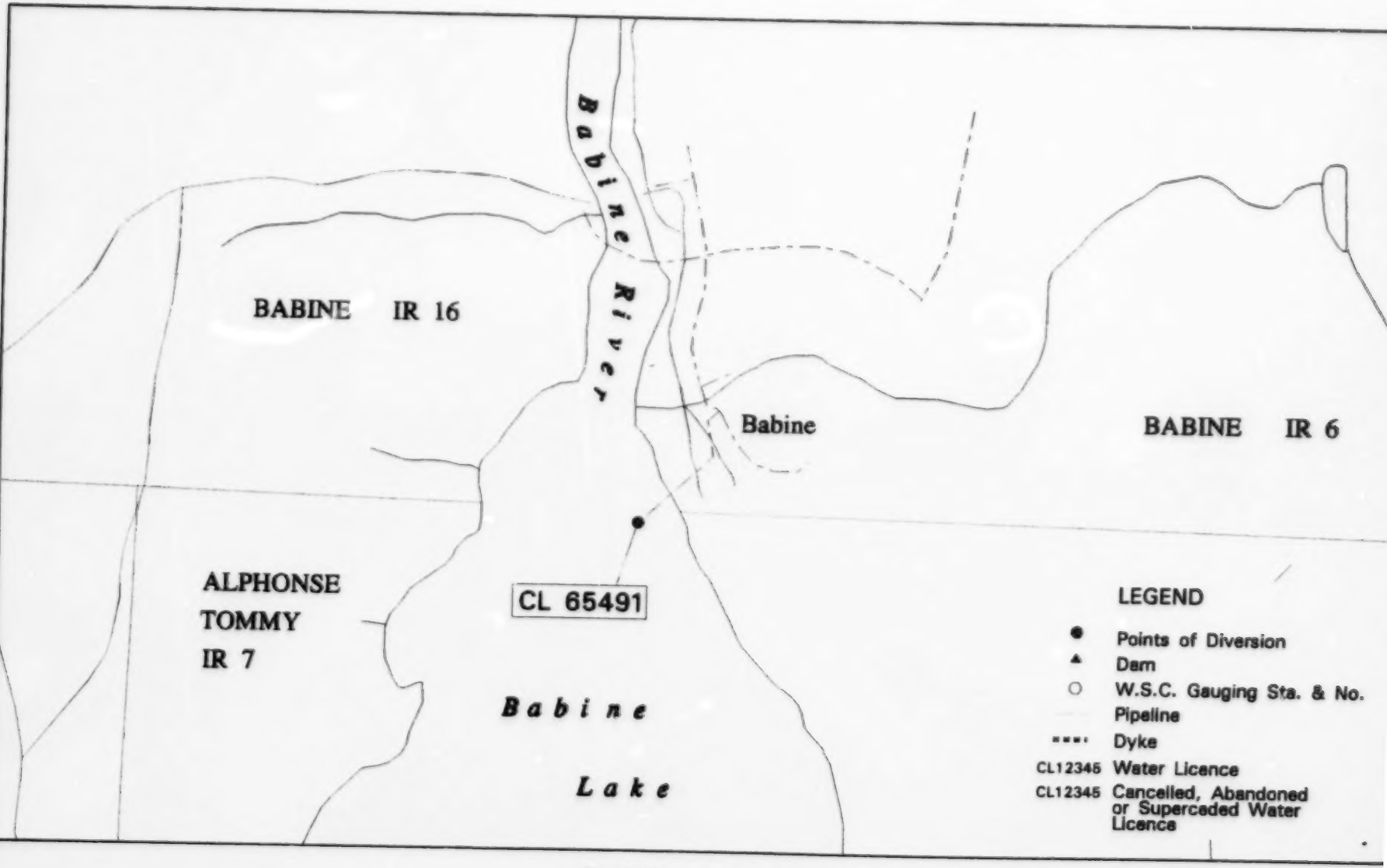
ATTACHMENT 8



Lake Babine

Scale 1:500,000

Ministry of Environment, Lands & Parks | Date: October 22, 1997 | Environment & Lands Division



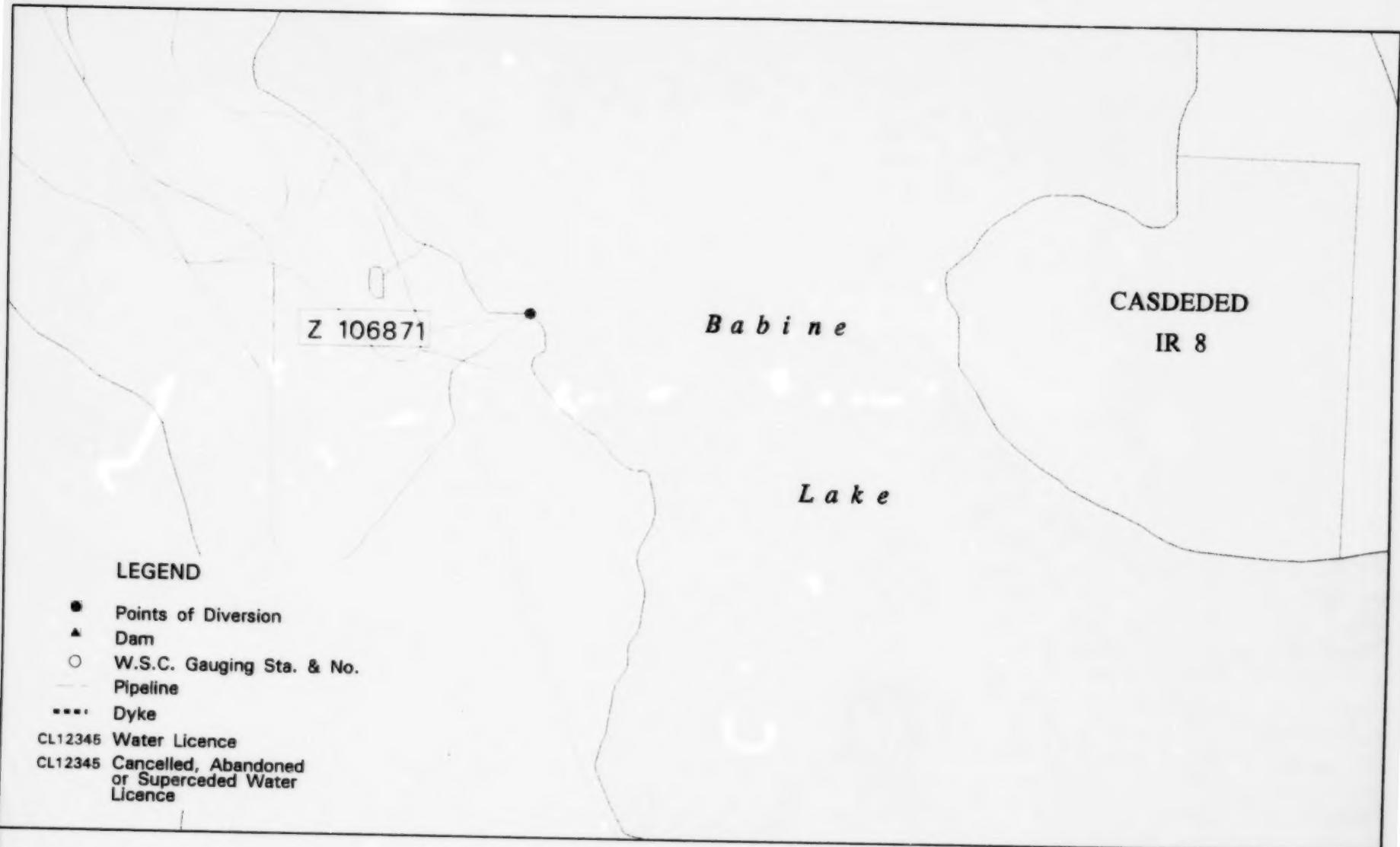
Babine North

Scale 1:10,000

Ministry of Environment, Lands & Parks

Date: October 08, 1997

Environment & Lands Division



Babine South

Scale 1:10,000

Ministry of Environment, Lands & Parks

Date: October 22, 1997

Environment & Lands Division